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1. A method for preparing a composite material which comprises the steps of:

- (a) dispersing silicon nitride whiskers in a suitable liquid at low shear and separating off the fines;
- (b) removing the liquid from the remaining silicon nitride whiskers;
- (c) blending a desired quantity of the whiskers from step (b) with a desired quantity of glass frit and a temporary binder in a suitable liquid to form a mixture;
- (d) coating a suitable carrier substrate with a layer of said mixture;

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- (e) evaporating the liquid out of said layer;
- (f) separating the thus-dried layer from said carrier; and
- (g) stacking a plurality of dried layers in a jig and hot-pressing the layers together at a temperature and pressure sufficient to cause the glass particles to flow to form a void-free matrix throughout which are dispersed said silicon nitride whiskers.

2. The method of claim 1 further comprising the step of treating said whiskers dispersed in said liquid with hydrofluoric acid.

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